Payment Methods in Mergers: An Investigation of Theoretical Models and Empirical Insights

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**Abstract**

Mergers and Acquisitions (M&A) are a prevalent form of corporate restructuring used to expand business size and volume. The corporate world today is witnessing a surge in this type of restructuring, impacting industries and significantly reshaping the marketplace. M&A has been a prominent trend in advanced capitalist countries since the late twentieth century, but it has only recently become a regular phenomenon in developing nations. The total number of M&A transactions worldwide nearly quadrupled between 1990 and 2001. This trend contrasts with earlier perceptions, where M&A was viewed as a threat, evoking images of clandestine corporate maneuvers. However, M&A has now assumed an international dimension due to global economic integration and the reduction of trade and investment barriers. In India, M&A is not a new concept. While companies have employed this form of restructuring in the past, Indian corporate houses are now refocusing on core competencies, market share, and global competitiveness. This refocusing has been accelerated by the entry of foreign competitors. Consequently, companies are compelled to grow and expand in their core areas of expertise. M&A is a highly effective method of corporate restructuring and has, therefore, become an integral part of the long-term business strategy of corporate enterprises. In this context, this chapter aims to discuss the trends, historical evolution, reasons, different forms, and various aspects of M&A.

The purpose of this chapter is to study the determinants of payment method choices in M&A transactions and to provide empirical evidence on these choices.

Key words: Abnormal returns, bidding firm, M&As, method of payment,

**Introduction:**

In recent years, the level of corporate merger activity has been increasing rapidly. The choice of payment method in M&A- cash, share, or a combination of these- can have a substantial impact on the successful completion of the transaction. It is generally regarded to be preferable by shareholders of the target company to receive a cash payment rather than shares of the target company for cash offers than for share offers (Ismail 2010). Among previous literature, there are several studies that have attempted to investigate the determinants of payment in M&A transactions. The choice of payment method in mergers is influenced by several variables such as information asymmetry, taxation, M&A regulations, accounting treatment, size of the firms, cash availability, ownership structure, business cycles, corporate control, credit rating, stock market performance, growth, and investment opportunities, etc. Empirical evidence has shown that the method of payment used in mergers has a significant effect on bidder and target returns. A firm will issue stock only when it is overvalued and will prefer to pay cash if their stock is undervalued (Myer and Majluf 1984). Abnormal returns to target shareholders are higher in cash offers than in stock offers. Bidder’s returns are also higher in cash offers, though abnormal returns are zero, reflecting a competitive takeover market (J.F. Weston).

Several theories attempt to explain the effect of method of payment in M&A. Target shareholders taxable gains in stock-for-stock exchanges may be deferred indefinitely. While the taxes on gains in cash transactions are payable immediately. Cash offers must therefore be higher to compensate for the availability of asset write-ups for future depreciation, and tax shelters may also explain the higher return to bidders in cash offers. Some writers argue for the information effect of stock vs. cash. Using stock implies that the bidder thinks its stock is overvalued. The signalling hypothesis says that using cash is a positive signal that future cash flows will be large enough to exploit investment opportunities or the takeover will generate large cash flows; using stock suggests that the bidder may not have sufficient internal financing. With this background, we will discuss one by one the factors that influence the choice of payment method in mergers. The following are the models related to the mode of payment in M&A deals.

1. Information Asymmetry.

2. Taxation Policy.

3. Relative size.

4. Managerial ownership and ownership structure.

5. Cash availability or free cash flows.

6. Debt financing or debt capacity.

7. Stock performance.

8. Investment opportunities.

9. Public target status.

10.  Intra-Industry and cross border deals.



**1. Information Asymmetry and method of payment:**

Asymmetry information models were first developed and originated by Myers and Majluf (1984). Many other models on information asymmetry have been developed following Myers and Majluf’s work, among them Hansen’s model (1987) of bargaining under asymmetric information and its extension developed by Eckbo, Giammarino, and Henkel (1990), Fishman’s preemptive bidding model (1989), and Berkovitch and Narayanan’s model of informational asymmetry with competition (1990). As their names indicate, they are based on the principle that there is an asymmetry between the information owned by the managers and the other agents of the market. In other words, managers have access to private information concerning the firm’s stock value and his investment opportunities, whereas external investors have no access to it. So if he strikes a deal with another agent having more information than him, a non-informed agent has to face heavy adverse selection problems because he does not know if the other agent has positive or negative information.

1. **Myers and Majluf Model:**

In a world of asymmetrical information between managers and investors, firms that raise external capital to finance their new projects have to face problems of adverse selection. Firms with low investment opportunities can issue stocks looking like those issued by firms with high investment opportunities. As a result, stocks from low-investment-opportunity firms will be overvalued, whereas stocks from high-investment-opportunity firms will be undervalued.

Myers and Majluf (1984) show that, in a world of asymmetric information, the choice of payment method by the bidding firms in acquisitions can reveal information concerning the bidder. The managers who own information and want to act in the interest of their actual shareholders will use stocks if they are overvalued. They will put some positive net present value investment aside if the stocks that would be used to finance the operation are undervalued by the market. So the decision to finance an investment by stocks will be interpreted by the market as bad news so that the stock price of the firm will decrease at the announcement of the acquisition. Moreover, investors are incited to decrease their valuation of a stock offer for fear of acquiring overvalued stocks. Conversely, when a cash offer is announced, the assets of the bidder will be considered as being undervalued, which constitutes a positive signal for investors.

1. **Hansen Model:**

Hansen imagines the existence of a bidding firm with a monopolistic access to information concerning the true value of the merger. The optimal strategy for the bidder in this case is to make one offer only. In cash offers, when the target holds private information concerning the state of its assets, a problem can occur; the target will only accept to sell its stocks if their value is inferior to the bidder’s offer. So as to protect itself from adverse selection phenomena, the bidder must base its optimal offer on “expected value” conditional on the offer being accepted. Thus, the target using the information at its disposal will not accept the offer each time, and as a consequence, the deal will not always take place. Then the bidding firm can use its own stocks instead of cash because stocks have a contingent pricing effect, which, at the same cost for the bidder, incites the target to accept all the offers that it would accept in cash.

Hansen’s predictions (1987) are also confirmed by Noronha and Sen (1995), who show that the probability of a stock offer has a negative correlation with the debt-to-asset ratio and a positive one with the leverage of the bidding firm, and by Houston and Ryngaert (1997), who show that high elasticity is more likely when the target is big and when the correlation between the returns of the target and those of the bidding firm are high.

1. **Fishman Model (1989):**

In this model, Fishman (1989) emphasises the role of payment method in preemptive bidding for the control of the same firm by several rivals. Indeed, if a potential bidder makes an offer, other potential bidders will then study the offer, obtain information concerning the potential profitability of the offer, and perhaps enter into the competition. Therefore, a preemptive bid may allow avoiding this competition because, in the case of a competition between several potential bidders, the target’s returns decrease as the competition goes on (Berkovitch and Narayanan (1990), Bradely, Desai & Kim (1988), and De Fedenia & Triantis (1996)). If a firm competes with a bidder that proposed an important initial valuation for the target, this firm may have to face a small probability of winning and small expected returns if it wins this competition with small expected returns. Thus, if the initial bidder sends a signal of high valuation, it can discourage competition. The fact that a higher offer shows a high valuation and that this can serve to get ahead of the competition has been demonstrated by Fishman (1988). On samples made up of offers in cash only. Contrary to Hansen’s model (1987), the target, like the bidders, is supposed to have access to private information on the profitability of the acquisition. In this case, stock offers become an interesting alternative to cash offers. Suppose the bidder offers an important sum if the target’s information indicates that the acquisition is profitable and a low payment in the opposite case. This leads the target to make an efficient decision given its information.

1. **Eckbo, Giammarino and Heinkel’s model :**

 This model is an extension of the model developed by Hansen (1987). It claims that an informational asymmetry on both sides between the bidder and the target can lead to an optimal mix of cash and stocks as a payment method. The authors show a separating equilibrium for which the true post-acquisition value of the bidding firm is revealed to the target by the composition of the mixed offer and where this revealed value is growing and more convex as the sum of cash increases. They argue that the abnormal returns of the bidding firm have two constituent parts: a component of synergy revaluation and a component of signal. The abnormal returns of the bidding firm are linked to the revaluation of synergy. In the case of stock offers, it is the opposite. Abnormal returns result from the signal of the stock offer. Only in a mixed offer can both a signal effect and a synergy revaluation effect take place. In addition, they argue that the target’s stock price increases at the acquisition announcement by an amount that is independent from the chosen payment method. This result is due to the fact that the bidder is compelled to make an acceptable offer for every kind of target, and as a consequence, there is no separation between the various targets.

Eckbo, Giammarino, and Heinkel (1990) have empirically tested their model on a sample of 12 Canadian deals, among which 56 are mixed offers. The abnormal returns observed are positive and significantly higher for mixed offers than for cash-only and stock-only firms. However, the empirical results do not allow confirming the model’s predictions.

1. **Berkovitch and Narayanan’s Model:**

Berkovitch and Narayanan’s model (1990) studies the role of the payment method in the competition between bidders and its effects on the returns of the target’s and the bidder’s shareholders. Their theory is consistent with the previous works. In this model, there are two types of bidders: high-type bidders and low-type bidders. The merged firm's value is higher for high-type bidders than for the low-type bidders. A potential bidder makes an offer with a given payment method, and this offer can be rejected or accepted by the target. If the offer is rejected, there is a time period during which no new offers can be realised. During this period, other potential bidders can enter into the competition. If it is actually the case, there is a competition between the two potential bidders, and the highest offer can be rejected or accepted by the target. If the offer is rejected, the process is repeated after a new time period. Thus, this model comes within an informational asymmetry’s framework, where the target earns a higher sum if it is acquired by a high-type bidder but earns a higher proportion of synergies if it is acquired by a low-type bidder. This result is due to the fact that the low-type bidder will have to face a higher competition than a high-type bidder, and it will be ready to offer the target a higher proportion of the created synergies. If the bidder is conscious of the kind of bidder he belongs to, then there is a unique separating sequential equilibrium in which the high-type bidder uses a higher amount of cash and the low-type bidder uses a higher proportion of stocks. The value of the offer is the same as in the case of symmetric information. Since the fraction of synergy offered by low-type bidders is higher than the one offered by high-type bidders, the latter have no incentive to imitate the former by offering stocks. Similarly, since the value of the offer made by low-type bidders is lower than the one realised by high-type bidders, the former have no incentive to imitate the latter by offering cash. As in the models of informational asymmetry, the offers are accepted without delay.

1. **Taxation Policy and method of payment**

Numerous researchers have shown that the choice of payment method is influenced by taxation. It is well known that any capital gains must be realised immediately for tax purposes. Cash offers are considered immediately taxable for the target’s shareholders. Thus, a cash offer requires the payment of a higher premium in order to compensate for the taxation increase. On the contrary, stock offers are non-taxable until the stocks are sold. In order to take the benefit, the offer needs to be composed of at least 50% stocks. Thus, although the deals financed with cash have an advantage over the deals financed with stocks from the bidder’s point of view, they require the payment of a higher premium. The amortisation of this goodwill will artificially bring down the bidder’s earnings. From the taxation point of view and not knowing the signal effect, the bidder’s shareholder will prefer a cash offer if the premiums offered to the target’s shareholder are not superior to the taxation advantages of the deal. The managers will be favourable to a stock offer in order to avoid the artificially decreased returns linked to the depreciation of the goodwill (Blackburn, Dark, and Hanson, 1997). The attraction of a target increases if it has cumulated tax losses and tax credits.

 From a legal point of view, two conditions are needed. The first is the continuity of the investor. The majority of the target’s stocks have to be acquired in exchange for the bidder’s stock. Thus, the target’s shareholders will be partial owners of the merged entity. Moreover, the continuity of the target’s operations has to be ensured. The acquisition has to have a legitimate goal, which will be proved so in case of a continuity of the target’s activity. If these conditions are verified, the merger becomes exempt from tax; the losses or the gains of the target’s shareholder can be postponed, and the tax characteristics of the target can be inherited. The notion of continuity of interest also applies to the taxation of firms. In a nontaxable deal, the tax credits not used by the target and the carryovers can be deducted from the taxable earnings of the future merged firm since the shareholders have kept sufficient ownership. In a taxable offer, the ownership rights are considered sold, and the bidder has the right to set up the depreciation basis of the assets purchased. The American tax laws allow carrying back the net operating losses for 3 years and carrying them forward for 15 years, and Indian tax laws allow carrying forward losses up to 8 years. The present value of this carryover is weak unless the firm has been profitable enough before and after the losses. However, the value of these tax characteristics increases when the losses are transferred to a bidding firm that owns important earnings before tax.

Wansley, Lane, and Yang (1983) link their study with the relationship between the tax status and payment methods. They utilise the market model to examine the influence of payment alternatives on the target firm’s cumulative average abnormal returns (CAARs). For the 41 working days examined after the acquisition announcement, they find that the targets are 33.4%, 17.47%, and 11.77% when financed by cash, shares, and the combination of the two, respectively. The possible explanation for this result, especially for the big difference between the cash offer and the share exchange, is consequently contributed to the taxation implication theory. They conclude that the fact of the substantially higher returns to target shareholders when financed by a cash offer indicates that acquirers need to pay the additional tax burden for the targets under such a circumstance. In this respect, a share exchange financing will defer the tax consequence until the share is eventually sold.

Harris, Franks, and Mayer (1987) also show that cash offers produce higher abnormal returns for targets by examining a large sample of 2500 acquisitions in the UK and US for the period 1955-1985. Further evidence of their study is provided as follows:

a. For both countries, all cash offers and all share exchange financing have been the most widely used payment methods in M&As. The reason for this phenomenon is that shareholders who are worried about the liability of paying the capital gains taxes will be willing to accept a share exchange offer, but others who are not interested in combining their portfolio with the bidder’s paper will be glad to receive cash. Harris, Franks, and Mayer efficiency. As for the form of cash-share combination, it is more commonly used in the UK rather than in the US.

b. There seems to be no clear evidence showing that the capital gains taxes are the main concern of the acquisition financing when cash is used in this circumstance. Due to the wide span of the study, which is stretching over a 30-year period, there have been some changes in tax laws and accounting standards in both countries within this period.

Harris, Franks, and Mayer show that, from 1965 to 1969, cash financing in this period did decline (with a percentage of 18.6%) when compared with that of the previous period, 1960-1964 (with a percentage of 29.2%). However, this trend was reversed from 1975 to 1979, with the proportion of cash financing rising to 33.6%. As a result, empirical evidence does not show a strong linkage between the capital gains taxes and the use of cash as the medium of exchange.

c. Their empirical findings also show that cash offers generate better post-acquisition performance for acquirers than all-share exchange offers, which are consistent with the prediction of the overvaluation proposition in an asymmetric market.

Huang and Walking (1987) find the same results as previous studies in terms of the target firm’s post-acquisition performance. Through a study of 204 pairs of mergers in the periods of 1977-1982, they find that the CAARs for cash offers, share exchanges, and the combination of cash and shares are 29.3%, 14.4%, and 23.3%, respectively. The significantly higher CAARs for cash financing are also attributed to the taxation implication theory as discussed earlier.

 According to Brown and Ryngaert’s model (1991), taxation plays an important role in the determination of the payment method. The bidding firm takes into consideration the target’s valuation of the stocks offered by the bidder, as well as the tax consequences of the offer given the payment method. The equilibrium is consistent with the returns observed for the bidder, but the model also allows doing different predictions from those that only consider the informational role of the payment method. For example, since the use of stocks is explained by tax advantages only, stocks should not be used in taxable deals. Moreover, this model supposes that every nontaxable deal, that is to say, stock and missed offers, reveals negative information concerning the bidder. The bidders who have a high valuation for their firm thus use at least 50% of stocks to avoid the taxation of the deal, and the bidders who have a low valuation of their firm use stocks to avoid the stocks issued to be undervalued. The empirical results they present are consistent with the idea according to which stocks are used for the tax advantage; only 7 taxation deals out of the 342 constituting the sample used stocks, and only 12 taxable deals used securities that could be transformed into stocks. Out of the 131 nontaxable deals, 86 were stock offers and 45 were mixed offers (34 were deals using more than 50% of stocks). Thus, mixed offers often use almost the maximum possible amount of cash while enjoying the tax-free status. This result shows that taxation plays an important role in the choice of payment method in the USA. Moreover, in accordance with the model’s predictions, the results show that the abnormal returns of mixed offers and stock offers are negative. The abnormal returns associated with cash offers are zero and significantly higher than those associated with cash offers of mixed offers. On the other hand, these results are not consistent with the idea according to which bidders signal a higher asset value through a more important use of cash in non-taxable deals. The results associated with mixed offers are not sensibly different from those associated with cash-only offers. The hypothesis of the role of taxation in the choice of payment method has also been verified by Noronha and Sen. (1995), since they show that the propensity to realise stock offers is positively linked to the cumulated tax credits of the target.

 Gilson, Scholes, and Wolfson (1988) show that there is no direct link between tax profits and the effects of wealth transfer. Niden (1986) finds no relation between the tax situation of the target's shareholders and the payment method, and for Auerbach and Reishus (1988), the tax savings due to the use of target losses and credits are not significant to explain the payment method.

If we consider the tax advantage linked to the use of debt, then a stock offer can have a negative impact on the stock price of the firm (Modigliani & Miller 1983; De Angelo & Masulis 1980, b). In this view, according to Nayar and Switzer (1988). The use of debt securities can entail tax advantages since the interests of the debt offered to shareholders are deductible for the bidder. The bidder can offer either cash or debt to avoid a stock price decrease that would occur in case of a stock offer, but an offer with debt will, however, be preferred if the bidder needs an important tax reduction. Thus, according to Nayar & Switzer (19880), a debt issue is significant to the market in that the firm anticipates its ability to export the tax deduction linked to the payment of the new debt and interests. They confirm their hypothesis through an empirical study that shows that for the firms using debt in their offer, the higher the tax rate, the more positive the market reaction.

      Contrary to the suggestions of the informational and tax hypotheses, Franks, Harris, and Mayer (1988) and Suk and Sung (1977) show that the targets abnormal returns in tender offers are higher than the ones in mergers. Even after the impact of the payment method has been controlled. This latter also shows that there is no relation between the offer premium and the institutional ownership of the target in cash offers, and there is no difference in premiums between cash offers and stock offers, even after the institutional ownership and other variables linked to taxation have been controlled. These results are also inconsistent with the informational and tax hypotheses.

      On the contrary, Eckbo and Langhor (1989) show, through a French sample of deals realised between 1972 and 1982, that the informational hypothesis seems to dominate the tax hypothesis.  Indeed, they show that the average premium is 17.2% in cash offers, whereas the post-expiration premium is practically the same whether the deal has been financed with stocks (23.7%) or with cash (22.5%). This result is inconsistent with the tax theory because the post-expiration premium should be higher for cash offers if the firms are using this payment method to pay a higher premium in order to compensate for the negative impact of taxation.

1. **Relative Size and method of payment:-**

The number of studies has related the choice of payment and the relative size. It is predicted that bidders are more likely to use stock financing when the size of the target (deal size) is large relative to the size of the bidder. In other words, the larger the relative deal size, the more likely the deal is financed with stock (Faccio and Masulis 2005). The reasons for these predictions are, firstly, when the target firm is relatively large, bidding firms are more likely to have insufficient unused debt capacity and liquid assets to finance the deal with cash. Secondly, relatively large targets have more bargaining power concerning the payment method than relatively small targets. Martin (1996), Grullon, Michaely, and Swary (1997), and Ghos & Ruland (1998) have linked the choice of payment methods to the relative size of the target to the bidder.

Martin’s (1996) show that the relative size is an important factor in determining payment methods, while this multinational logistic model does not yield the same result as his descriptive statistic analysis. Eventually, based on the result of the logistic model, Martin (1996) concludes that the relative size has no clear and closed association with the choice of payment methods in M&As. Grullon, Michaely, and Swary (1997) find that the relative size of target banks to acquiring banks is one of the most important determinants in choosing payment methods. Their results indicate that the bigger the relative size of the target to the acquirer, the more probable the merger is financed by share exchange rather than cash offer.

Ping-Shun Zhang (2003) reports the same finding as Grullon, Michaely, and Swary (1997). his study analyses a data sample of UK M&A activities in 1990’s to examine the determinants of payment methods in M&A’s , employing univariate descriptive analysis, decreminant analysis and multinomial logistic regression . The empirical results report that the larger the relative size, the more likely share exchange would be adopted in M&As. This result is similar across the three methods used and confirms their hypothesis and is also consistent with the previous studies.

Ghosh & Rolland (1998) find that the results from both descriptive statistics and multinomial logistic models show no significant difference in three payment methods with regard to the relative size variable. Accordingly, they conclude that there is no direct association between the choice of payment methods and the relative size of the target to the bidder.

1. **Managerial ownership and Payment methods:**

The choice of payment methods in M&As can be related to the managerial ownership of both acquirer and target. Managerial ownership refers to the percentage of equity held by management and insiders in the acquiring and target firms. It is often said that the greater the management’s share of acquiring or target firms, the more likely the cash financing is used.

Stulz (1988) investigates the association between target managerial ownership and payment methods in M&As. His finding suggests that the larger the fraction of ownership held by target management, the more likely the transaction will be financed by cash. Amihud, Lev, and Travlos (1990) study the relationship between acquirer managerial ownership and the choice of payment methods and show that the bidding firm with a larger fraction of management share ownership is more likely to use a cash offer than a share exchange. Grullon, Michaely, and Swary (1997) find that cash offer is a positive function of target managerial ownership. By investigating the relation between both acquirer and target managerial ownership and payment methods, the researchers find that cash offers are more likely to be used when a large fraction of assets is held by target management. However, they fail to observe a direct link between acquirer managerial ownership and payment methods. In contrast to Stulz (1988) and Grullon, Michaely, and Swary (1997), they find that the larger the fraction of equity held by target management, the more likely share exchange is used. Meanwhile, their results show that cash offers are associated with higher managerial ownership of the acquirer.

Martin (1996) also finds a significant non-linear relationship between management ownership of the acquiring firm and the probability of cash financing. When the management ownership is between 5% and 25%, the probability of cash financing is high; otherwise, managers suffer from the dilution of corporate control. Acquiring firms with very low or very high management ownership are less likely to be concerned with corporate control issues. Managers with a high ownership stake are less concerned because the probability that these managers retain their job and influence in the combined firm after a stock-financed acquisition is high. Managers with a low ownership stake are less concerned because these managers already have a high risk of losing their job and low influence in the bidding firm before a stock-financed acquisition.

Ghosh and Ruland (1998) examine the relationship between managerial ownership of the target firm and the choice of payment method. The final data consists of 212 successful acquisitions from 1981 through 1988 between public firms in the United States. Ghosh and Ruland (1998) find a significant positive relationship between managerial ownership of the target firm and the probability of stock financing. Managers of the target firm prefer to receive stock when they desire to maintain corporate control after the acquisition. Ghosh and Ruland (1998) also find that the payment method choice is more affected by target firm managerial ownership than acquiring firm managerial ownership.

Zhang (2003) finds no evidence for the management ownership hypothesis. A possible explanation, not given by Zhang (2003), is that the firms in the data sample have very low management ownership. Managers with low ownership are less likely to be concerned with the dilution of corporate control (Faccio and Masulis, 2005). Faccio and Masulis (2005) use the ultimate voting stake of the bidder’s target controlling shareholder as a measure of corporate control. Swieringa and Schauten (2007) also find that bidders with an intermediate fraction of closely held shares prefer cash more than bidders with a relatively low or high ownership stake.

The ownership structure of the target firms should also affect the choice of payment methods. When the target firm is closely held by the management or controlled by a major shareholder, bidding firms should be reluctant to offer stock because stock-financed acquisitions can create a new large blockholder in the combined firm. The risk of losing control increases when the ownership structure of the target firm is highly concentrated. Moreover, the risk of creating a large blockholder is higher when the relative size of the deal is large (Faccio & Masulis 2005). However, the creation of a new large blockholder in the combined firm can benefit the other shareholders because this blockholder can effectively monitor the management, which reduces the agency cost of equity. The product between the target’s fraction of closely held shares and the relative size of the deal is used to examine the relationship between the risk of losing control and the payment method choice.

1. **Cash availability or Free cash flows and method of payment:**

Firms with high levels of free cash flows are more likely to have sufficient internally generated funds to finance acquisitions with cash. Bidder’s free cash flows are used as a measure of the ability to pay cash, not financed from additional borrowing (Zhang 2003). “Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital” (Jensen 1986). Inefficient managers use free cash flow for their own interest through investing in projects with a negative net present value. Thus, free cash flows must be paid out to shareholders by paying dividends or repurchasing shares; otherwise, the agency conflict between managers and shareholders increases (Jensen 1986).

 Jensen (1987) notes that management usually has incentives to use excess free cash flows when there are acquisition opportunities and cash offers have a positive effect on the stock market. Generally, when cash offers are announced, they may reveal positive intrinsic information to the outsiders and signal asset undervaluation of the acquirer. Myers and Majluf (1984) have argued that market participants often take cash offers as good news with regard to the value of the bidding firm’s assets and shares. While investors consider share exchange as bad news since it implies that the acquirer is overvalued. Thus, the prediction is that bidders with high levels of free cash flows are more likely to use cash financing. Zhang (2003) used the bidder’s dividend payout ratio as a proxy for the bidder’s free cash flows. A higher dividend payout ratio is likely to signal the higher level of free cash flows because free cash flows must be paid out to shareholders by paying back dividends or buying back shares. The dividend payout ratio is computed by dividing common dividends (cash) by net income after preferred dividends.

1. **Debt-financing and method of payment:**

The assumption is that bidders with a greater ability to borrow are more likely to finance acquisitions with cash, financed from additional borrowing. In other words, when the internally generated funds are insufficient to finance investment projects with cash, additional borrowing is required. The bidder’s fraction of collateral assets is used as a measure of the ability to borrow (Faccio and Masulis, 2005). Collateral assets are tangible assets that secure a debt obligation. Debt holders in firms with collateral assets are secured against the firm’s default risk. In case of default, debt holders are the first in line to recover their money by selling the collateral assets. Myers (1977) argues that debt holders in firms with fewer tangible assets and more growth opportunities are subject to greater moral hazard risk, which increases the cost of debt, often making stock more attractive. Hovakimian, Opler, and Titman (2001) find that a firm’s percentage of tangible assets has a strong positive influence on its debt level. Therefore, debt holders in firms with collateral assets demand a lower return, which results in a lower cost of debt. Thus, firms with a large fraction of collateral assets have better access to debt markets, which results in a greater ability to issue debt and, therefore, a greater ability to pay cash.

The bidder’s financial leverage, the debt-to-assets ratio in book value terms, is used as another measure of the ability to borrow (Faccio & Masulis, 2005). Assuming that firms with low financial leverage have a debt level below their target debt level, the static trade-off theory states that these firms should issue debt to finance acquisitions because of the benefits of debt. Further, assuming that internally generated funds are insufficient and that firms with low leverage have a sufficient unused debt capacity, the pecking order theory states that these firms should issue debt to finance acquisitions. Thus, firms with low leverage have a greater ability to issue debt and therefore a greater ability to pay cash. The expectation is that bidders with low leverage are more likely to use cash financing. Furthermore, bidders with high financial leverage are constrained in their ability to borrow. Thus, these bidders are more likely to use stock financing.

The bidder’s asset size is likely to influence its financing choices. Large firms are usually more diversified than small firms. Diversification leads to a low probability of bankruptcy, lower cost of debt, and lower transaction costs. This leads the large firms to access debt markets better than small firms. Thus, cash financing should be more feasible in the case of larger firms. Larger firms are also more apt to choose cash financing in smaller deals due to its ease of use, provided they have sufficient unused debt capacity or liquid assets. Further, the use of cash allows the bidder to avoid the significant costs of obtaining shareholder approval of preemptive rights exemptions and stock authorisations and the higher regulatory costs of stock offers (Faccio and Masulis, 2005). Following Faccio and Masulis (2005), the bidder’s asset size is measured by the natural logarithm of the book value of total assets at the year-end prior to the bid.

1. **Stock market performance and method of payment:**

Stock market performance may be strongly related to the choice of payment method in corporate M&As. According to Brealey et al. (1976), Teggart (1977), Marsh (1982), and Choe et al. (1993), an increase in general economic activity results in an increase in the probability of a stock offer. In other words, when the prices of shares are increasing, shareholders of target firms would like to use share exchange as the medium of payment. Moore (1980) studies the linkage between corporate investment financing patterns and business cycles. He shows that share exchange is more frequently opted for than cash offers during the expansionary phase of business cycles.

Martin (1996) claims that share exchange in acquisitions is positively associated with the performance of the stock market. He uses the Standard and Poor’s 500 (S&P 500) index to measure the performance of the stock market. By investing in the relationship between the choice of payment methods and business cycle variables of S&P’s 500, Moody’s BAA bond yields, and a few other variables, he finds that only stock market performance as measured by S&P’s 500 is significantly and positively related to the choice of share exchange in M&As. Vasconcellos and Kish (1998) do not report the linkage between share exchange and stock market performance, but they find that firms with higher share prices are more likely to acquire foreign firms whose share prices are relatively low. A booming stock market means buoyant profitability for firms. Under such circumstances, the share of potential acquirers seems to be more attractive than cash offered for consideration. Therefore, Martin’s (1996) findings that associate share exchange with overall stock market performance in general could be a reflection on the performance of acquirers instead. So the several authors use the ratio of market value per share as the measurement of acquirers share performance. A higher value for the ratio implies the good performance of the firm on the stock exchange, therefore making share exchange more attractive than cash offers.

Zang analysed the data sample of UK cases of mergers and acquisitions in the 1990s. The empirical results highly support the hypothesis that the better performance of acquirer shares on the stock market, the more probable the share exchange method would be adopted. The study shows that the coefficients of cash offers relative to the other two payment methods are significantly different under the market-to-book value measurement (both are highly significant at the 1% level). Generally, a higher value of the market-to-book ratio indicates better performance of the acquirer's shares on the stock markets. Thus, the shares are more attractive to the target shareholders when offered as a consideration of the payment medium. By examining the logistic regression results, the study finds that there exist negative coefficients with high values of the t-statistics in the log odds ratios of cash offers to the other two payment methods. The results indicate that the higher the value of the acquirer's market-to-book ratio, the more likely the mix of cash and share or share exchange would be adopted as against the cash offer. The results are highly supportive of the hypothesis, which states that good performance of the acquirer's share on the stock market makes share exchange more likely to be used in M&A’s.

1. **Investment Opportunities and Payment Methods:-**

It is predicted that bidders with greater investment opportunities are more likely to use stock financing. The investment opportunity theory has its foundation in Myer’s (1977) study, in which a firm’s borrowing is inversely related to its investment opportunities. When a firm is burdened with risky debt, some of the gains of its future investments accrue to existing creditors. Therefore, managers of high-growth bidders are reluctant to borrow because additional borrowing increases monitoring by debt holders. Myer’s (1977) theory can be applied to the merger context. A merger is a particular kind of large investment with an uncertain outcome (it can result in a successful and profitable merged entity or an unsuccessful and unprofitable one). The method of financing the takeover might affect the manager’s future discretion to take advantage of other investment opportunities. Hence, firms that have investment opportunities prefer to use stock as a method of payment and invest more after the merger than firms that use cash.

In the merger context, the investment opportunities theory has been tested by Martin (1996), who uses Tobin’s Q as a measure of investment opportunities. A high market value compared to the book value of the assets is an indicator of a well-run firm or one with good business opportunities. Martin’s (1996) result confirms that firms with high Tobin’s Q are more willing to use stock as a method of payment in mergers.

According to Lamont (2000), there is a very high correlation between the level of planned investments and the investments actually made. Hence, managers must plan out investments in advance based on the beliefs about the firm’s investment opportunities and then follow their plan strictly. According to Lamont’s (2000) findings, it can be argued that the level of post-merger investments is a proxy for the planned ones and, therefore, for the managers “believed “investment opportunities of the merged entity.

Based on Lamont’s (2000) findings on investment and investment plans Giulli tested the effects of the investment opportunities on the method of payment in mergers. In the empirical analysis, the researcher analysed a sample of 1462 completed US mergers announced between 1984 and 2000 (of which 574 were cash mergers, 598 were stock mergers, and 298 were mixed mergers). The univariate analysis shows that the C A merged—after the “new firm” is significantly lower for merged entities that have used cash as a method of payment than for merged entities that have used stock. The univariate analysis is in line with the investment opportunities theory and suggests that an acquirer with high internal investment opportunities would be less willing to use cash as a method of payment.

The second univariate analysis, the investment opportunities portion of Tobin’s Q, is not captured by the capital expenditures, as is the case in the multivariate analysis. Hence, the result supports the investment opportunities theory. The legit regressions show that the investment opportunities proxy (CA merger-after) is strongly significant. Hence, investment opportunities do drive the choice of the method of payment in mergers, confirming the investment opportunities theory. Thus, the results show that investment opportunities affect the method of payment in mergers.

1. **Public- target status and method of payment:**

The prediction is that bidders acquiring private and subsidiary targets are more likely to use cash financing. There are some private and subsidiary targets that are highly concentrated. It is described that the risk of losing control increases when the ownership structure of the target is highly concentrated. Thus, bidders acquiring private and subsidiary targets should be reluctant to offer stock because a stock-financed acquisition can create a large blockholder in the combined firm. Secondly, selling a private firm is often motivated by the impending retirement of the manager with the highest ownership stake. These managers are more likely to prefer cash because they need cash for future consumption (Faccio and Masulis, 2005). Thirdly, important motives for firms to sell their subsidiary are financial distress risk and a desire to restructure towards their core competency (Faccio and Masulis, 2005). In a stock offer, the seller remains affected by the subsidiary through the fluctuation in the stock price. Therefore, firms selling subsidiaries are more likely to prefer cash. Following Faccio and Masulis (2005), two dummy variables are used to determine the relationship between the target’s public status and the payment method. The first dummy variable equals ‘1’ if the target is a private firm or a subsidiary (private target). The second dummy variable equals ‘1’ if the target is a subsidiary and equals ‘0’ if the target is a private or a public firm (subsidiary target).

1. **Intra-Industry and cross-border deals and method of payment:**

Hansen (1987) suggests that targets are reluctant to accept a stock offer when they have less information concerning the bidder’s equity value and future earnings than the bidder itself because stocks have contingent pricing characteristics. This asymmetric information problem is larger if the bidder and target industries differ. The prediction is that targets are more likely to accept stock as payment if they know the risks and prospects of the bidder’s industry, which is certainly the case in an intra-industry deal (Faccio and Masulis, 2005). This asymmetric information problem is also larger if the bidder and target countries differ. The prediction is that targets are more likely to accept cash as payment if they know less about the risks and prospects of the bidder’s country, which is certainly the case in a cross-border deal. Further, foreign shareholders are exposed to exchange risk and higher liquidity risk and have higher transaction costs and less timely, more limited access to firm information than domestic shareholders (Faccio and Masulis, 2005). Following Faccio and Masulis (2005), two dummy variables are used to capture these effects. The first dummy variable equals ‘1’ if the bidder and target are in the same industry and equals ‘0’ if the bidder and target are not in the same industry (INTRA\_INDUSTRY). The assumption is that the bidder and target are in the same industry when the SIC codes coincide on the 3-digit level. The second dummy variable equals ‘1’ if the bidder and target are not in the same country and equals ‘0’ if the bidder and target are in the same country (cross-border).

Swieringa and Schauten (2007) analysed the data sample of 227 M&As announced during the 10-year period between January 1996 and December 2005 by public bidders from the Netherlands. The study finds that intra-industry deals are more likely to be financed with equity than cross-industry deals.

**Recent M & A’s in reference to Indian Market:**

Here are some recent highlights of mergers and acquisitions (M&A) in India that align with the trends discussed above theoriese:

1. **Shriram Group's Insurance Arm Merger**: The National Company Law Appellate Tribunal (NCLAT) approved the merger of Shriram GI Holdings with Shriram General Insurance and Shriram LI Holdings with Shriram Life Insurance. This move aligns with the trend of corporate restructuring to enhance market competitiveness.
2. **Axis Bank and Citibank**: Axis Bank completed the acquisition of Citibank's consumer business in India for ₹11,603 crores. This deal reflects the focus on expanding market share and core competencies.
3. **Reliance Retail and Ed-a-Mamma**: Reliance Retail acquired a 51% stake in Ed-a-Mamma, a kids' and maternity wear brand. This acquisition highlights the growing trend of diversification and strategic partnerships.
4. **Adani Enterprises and IANS**: Adani Enterprises acquired a majority stake in IANS India Pvt Ltd, consolidating its presence in the media sector.

These examples illustrate how Indian companies are leveraging M&A to strengthen their market position and adapt to global economic integration.

**Conclusion:**

 The purpose of this chapter is to study the determinants of the choice of payment methods in mergers and acquisitions and also to provide empirical evidence on the choice of payment methods in M&As. We find that the choice of methods of payment in acquisitions is dependent upon a number of variables, such as taxation policy. Relative size, managerial ownership and ownership structure, cash availability, information, signalling, etc. Empirical studies on these variables suggest the researchers’ for further study in this respect by applying econometric models, e.g., the multinomial logistic model, to explore the close relationship between payment methods and the financial variables, thereby deciding which payment alternative is preferable in M&A transactions under particular circumstances. This investigation also suggests the researcher study the post-acquisition performance with regard to the choice of payment methods in M&As in order to uncover whether a particular exchange medium is rationally chosen by the two parties and is justifiable in the long run. With this theoretical background, the present research is undertaken to analyse the performance of mergers in India in the short run as well as in the long run with respect to the method of finance.

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